

**METHOD AND SYSTEM FOR CHARGING BATTERIES****ABSTRACT OF THE DISCLOSURE**

The invention concerns a method (300) for charging a set of batteries. The method includes the steps of charging (314) a first battery (116) with a charging current from a power supply (138), monitoring (316) a parameter of the first battery during the charging step and selectively diverting (318) at least a portion of the charging current used to charge the first battery to charge a second battery (118). The first and second batteries are charged simultaneously after the parameter of the first battery reaches a predetermined threshold. As an example, the parameter can be a battery voltage or a battery temperature rate.